

Graduate Program in Mathematics and Statistics

Program Bylaws

Washington State University

Administrative Home: Graduate Program in Mathematics and Statistics

Last Revised by Faculty: May 20, 2022

Last Faculty Senate Approval Date: Fall 2015

1 Objectives

1.1 Degrees Offered

MS, PhD

1.2 Discipline

Mathematics and Statistics

1.3 Mission of the Program

To educate and develop leaders in Mathematics and Statistics with careers in academic settings (research and teaching at the undergraduate level and beyond), and in industrial and business settings.

The degree of Master of Science (MS) in Mathematics or Statistics represents substantial mathematical and statistical training beyond the baccalaureate, which is sufficient for many career goals, such as teaching at the undergraduate level and positions in industry. The degree of Doctor of Philosophy (PhD) in Mathematics or Statistical Science is awarded in recognition of distinctive scholarship and original contributions to knowledge in their field. The PhD program is especially designed to prepare the student for teaching at the graduate level, and doing mathematical and statistical research in academic, industrial, and business settings.

2 Membership

2.1 Graduate Faculty

- A. Graduate Faculty with the Mathematics and Statistics Program may be WSU Tenure Track, WSU Career Track, or WSU adjoint/adjunct faculty, subject to the limitations and definitions within this document. Graduate Faculty designated as initial Mathematics and Statistics Program Graduate Faculty (listed in Section 9 of this document) will be approved when new bylaws are approved by the Faculty Senate. Graduate Faculty subsequently added to the program via the process outlined in Section 2.5 below will be approved by the Graduate School.
- B. The Graduate School definition of “active membership” in the Graduate Faculty of the Department of Mathematics and Statistics will be termed “voting eligible” throughout this document.

2.2 WSU Campus and Extension Site Participation

- A. The MS and PhD degrees in Mathematics and Statistics are offered through the Pullman campus of Washington State University as approved and authorized by the Higher Education Coordinating Board (HECB) of Washington state.
- B. Tenure and tenure-track Graduate Faculty in the Department of Mathematics and Statistics at all regional campuses and other affiliated university sites may participate equally in the Graduate Program in Mathematics and Statistics as supporting site faculty with full program rights and responsibilities. As such, they are entitled to serve as chair, co-chair, or member of graduate student committees (as defined by faculty roles, below); teach graduate courses, supervise research, and serve as a member of the Mathematics and Statistics Graduate Studies Committee or its Chair.

2.3 Graduate Faculty Participation

- A. Graduate Faculty participation in the Graduate Program in Mathematics and Statistics is independent and separate from academic department, school, or college affiliations.
- B. **Disciplinary Expertise:** Graduate Faculty within the Graduate Program in Mathematics and Statistics are expected to have a PhD or equivalent doctoral-level degree in a field related to the Graduate Program in Mathematics. In addition, they must have demonstrated disciplinary expertise in a field related to the Graduate Program in Mathematics and Statistics, interest and experience in mentoring and teaching of graduate students in this field, and relevant professional accomplishments.
- C. **Active Research:** Mathematics and Statistics Graduate Faculty must be actively involved in research and graduate level teaching related to Mathematics and Statistics as evidenced by recent external grant or contract support, related peer-reviewed publications within the last five years, graduate student mentoring within the last five years, teaching of relevant graduate level courses, or other relevant professional accomplishments.

2.4 Faculty Roles

- A. **Tenure Track Faculty in the Department of Mathematics and Statistics at Washington State University:** All Tenure Track Faculty (pre-tenured and tenured) from the Department of Mathematics and Statistics are automatically approved Graduate Faculty in Mathematics and Statistics. They are entitled to act as chair, co-chair, and member of graduate student advisory committees, teach graduate courses, serve as Program Director, and serve on all Mathematics and Statistics Program committees. They are voting eligible.
- B. **Tenure Track Faculty Outside of the Department of Mathematics and Statistics at Washington State University:** Tenure Track Faculty outside of the Department of Mathematics and Statistics who are approved Mathematics and Statistics Program Graduate Faculty are entitled to act as co-chair or member of graduate student advisory committees, and teach graduate courses. They may not serve as Program Director nor on Mathematics and Statistics Program committees. They are not voting eligible. When serving as co-chair of a doctoral committee, they must co-chair with a Tenure Track Faculty member who is also a member of the Mathematics and Statistics Graduate Faculty.

- C. **Career Track Faculty:** Career Track Faculty eligible for Graduate Faculty status include those in the Research, Scholarly, and Clinical sub-tracks in the Department of Mathematics and Statistics. Approved Career Track Mathematics and Statistics Graduate Faculty are entitled to act as co-chair or member of doctoral graduate student advisory committees, act as chair, co-chair, or member of Master's graduate student advisory committees, teach graduate courses, and serve on all Mathematics and Statistics Program Committees. They are voting eligible. When serving as co-chair of a doctoral committee, they must co-chair with a Tenure Track Faculty member who is also a member of the Mathematics and Statistics Graduate Faculty.
- D. **Career Track Faculty Outside of the Department of Mathematics and Statistics at Washington State University:** Career Track Faculty from other departments eligible for Graduate Faculty status include those in the Research, Scholarly, and Clinical sub-tracks. Approved Career Track Graduate Faculty are entitled to act as co-chair or member of doctoral graduate student advisory committees, act as co-chair, or member of Master's graduate student advisory committees, and teach graduate courses. They are not voting eligible. When serving as co-chair of a doctoral committee, they must co-chair with a Tenure Track Faculty member who is also a member of the Mathematics and Statistics Graduate Faculty.
- E. **Adjoint and Adjunct Faculty:** Professionals external to WSU may be granted Graduate Faculty participation within Mathematics and Statistics if they are first officially approved as adjoint or adjunct faculty for WSU. Adjoint and adjunct faculty who are approved as Mathematics and Statistics Graduate Faculty are entitled to act as a member of graduate student advisory committees and teach graduate courses. They may not serve as Program Director nor on Mathematics and Statistics Program Committees. They are not voting eligible. Their appointment as a Mathematics and Statistics Graduate Faculty member is for a three-year term, and must be evaluated for re-appointment (see Section 2.6).
- F. **Emeritus Faculty:** Mathematics and Statistics Graduate Faculty who enter Emeritus status may complete their current terms as chairs of graduate student advisory committees for up to one year after retirement but may not sit as chair on new student advisory committees. Emeritus faculty who are approved as Mathematics and Statistics Graduate Faculty may act as a chair, co-chair or member of graduate student advisory committees and they can teach graduate courses. They may not serve as Program Director nor on Mathematics and Statistics Program Committees, and they are not voting eligible. Their appointment as a Mathematics and Statistics Graduate Faculty member is for a two-year term, and must be evaluated for re-appointment (see Section 2.6).
- G. **Individuals who are not Graduate Faculty in the Mathematics and Statistics Program:**
- i. Faculty who are members of the Graduate Faculty in another WSU graduate program may serve on a graduate student's advisory committee without becoming Graduate Faculty in the Department of Mathematics and Statistics. They have no additional rights and responsibilities in this program, unless they are approved as Graduate Faculty in the Mathematics and Statistics Program.
 - ii. Individuals not officially participating as Graduate Faculty in any Graduate Program at WSU (for example, a faculty member from another university or research entity) may be approved to serve as a member for an individual

student’s advisory committee on a case-by-case basis. The committee chair for that student should forward the name and their curriculum vitae to the Mathematics and Statistics Program Director. Once approved, the department coordinator will submit the curriculum vitae alongside any committee change or program of study forms submitted for the student. They have no additional rights and responsibilities in this program unless they are approved as Graduate Faculty in the Mathematics and Statistics Program.

iii. Table: Summary of Participation

The table below summarizes the roles and participation level for Graduate Faculty members in graduate student committees within the Mathematics and Statistics Program as described above.

		Faculty Roles						
Grad Fac in Math/Stat		Chair PhD Committee	Chair MS Committee	Co-Chair Committee	Member of committee	Teach grad courses	Member of departmental committees	Voting Eligible
Automatic	Tenure Track in Math/Stat	✓	✓	✓	✓	✓	✓	✓
Voted in	Tenure Track - not Math/Stat ¹	x	x	✓	✓	✓	x	x
Voted in	Career Track in Math/Stat ²	x ³	✓	✓	✓	✓	✓	✓
Voted in	Career Track - not Math/Stat ¹	x	x	✓	✓	✓	x	x
Voted in for 3 year term	Adjoint/Adjunct	x	x	x ³	✓	✓	x	x
Voted in for 2 year term	Emeritus	✓	✓	✓	✓	✓	x	x
No	Graduate Faculty in another WSU program	x	x	x	✓	x	x	x
No	External to WSU	x	x	x	✓ ⁴	x	x	x

¹ Faculty from another department who is a Dept of Mathematics and Statistics Graduate Faculty Member (perhaps because the other department does not have a graduate program, or they are an affiliate faculty member)

² Career track is defined to be research, scholarly, and clinical subtracks

³ Approvable upon departmental submission of exception memo

⁴ With submission of CV and review by dept chair

2.5 Application for Membership

- A. Initial Graduate Faculty within the Graduate Program in Mathematics and Statistics are listed in Section 9 of this document and have been approved by the existing Graduate Mathematics and Statistics faculty and the Dean of the Graduate School.
- B. All new tenured and tenure-track WSU Mathematics and Statistics Department faculty will automatically become Graduate Faculty that are voting eligible within the Graduate Program in Mathematics and Statistics.
- C. Other candidates for Graduate Faculty participation within the Graduate Program in Mathematics and Statistics should be nominated by a Mathematics and Statistics

Graduate Faculty member (or may self-nominate) by petition to the Chair of the Graduate Studies Committee. The petition should include a letter of nomination and a curriculum vitae for the nominee. The Chair will circulate application materials to all voting-eligible Graduate Faculty prior to voting and administer the process of voting. Acceptance as Graduate Faculty requires a positive vote from a majority of faculty who respond to the vote.

- D. In addition to a commitment to maintain the highest standards of mentoring for graduate students, anticipated contributions or qualifications for all successful Graduate Faculty applicants include one or more of the following:
 - i. History or reasonable expectation of an active, funded research program that can plausibly be relied upon as the source of continuing support of a Mathematics and Statistics graduate student.
 - ii. History of or willingness to participate as appropriate in administrative, teaching, and other functions of the Mathematics and Statistics graduate program. This may include serving on graduate program administrative committees; serving as a thesis or dissertation committee member or chair; or providing graduate level instruction.
 - iii. History of publication of peer-reviewed manuscripts in a discipline related to Mathematics and Statistics.

- E. A list of newly approved Graduate Faculty, along with a curriculum vitae for each candidate, may be forwarded to the Dean of the Graduate School at the time that they are approved or during the annual update. With the dean's approval, they will be added to the Graduate Faculty list for the Program in Mathematics and Statistics.

2.6 Continuation of Membership

- A. Graduate Faculty appointments to the Graduate Program in Mathematics and Statistics for members who are not WSU Mathematics and Statistics Department faculty (i.e. Emeritus or adjunct faculty) will be reviewed for continuation of active membership by the Graduate Studies Committee. They will be evaluated based on contributions to graduate instruction, research, and teaching. These reviews will be conducted every three years for adjunct/adjoint faculty and every two years for Emeritus faculty. Contributions to the Graduate Program in Mathematics and Statistics shall be a requirement for continued active membership. Contributions may take the form of:
 - i. Committee chair, co-chair, or member for graduate students in the Graduate Program in Mathematics and Statistics.
 - ii. Teaching or co-teaching a graduate course in Mathematics and Statistics
 - iii. Supervising research for graduate students in Mathematics and Statistics
 - iv. Serving in the administrative and committee structure of the Graduate Program in Mathematics and Statistics.

- B. Faculty who are not WSU Mathematics and Statistics Department Faculty and who do not make any of the contributions as stated in Item A above to the Graduate Program in Mathematics and Statistics for three consecutive years will not be renewed as Graduate Faculty. Initiation of any of the activities described in Item A above could lead to reconsideration for renewal of Graduate Faculty membership.

2.7 Discontinuation of Membership

Upon request of a Graduate Faculty member and with the support of the Program Director, an individual's membership can be discontinued. If that individual's research and graduate training activity should change, they may reapply for Graduate Faculty membership at any time.

2.8 Membership Appeal Process

Appeal of any membership decision in the Graduate Program in Mathematics and Statistics must be made by the affected individual in writing to the Chair of the Graduate Studies Committee within 30 calendar days of the decision. The appeal is determined by the majority vote of Mathematics and Statistics Graduate Faculty who respond to the vote. Final written appeal may be made to the Dean of the Graduate School within 30 calendar days of the Mathematics and Statistics Graduate Faculty vote.

3 Administration

Administration of the program and its activities is vested in the Mathematics and Statistics Graduate Studies Committee (GSC).

3.1 Chair of the GSC

- A. The Chair shall serve a term of two years and is eligible for re-election if nominated to continue in this position in accordance within the terms of the initial appointment and with final approval of the deans as described in (B) below. This role is often referred to as the Graduate Program Director by the Graduate School.
- B. The Chair of the GSC will be nominated by any voting-eligible Mathematics and Statistics Graduate Faculty and accepted by majority vote of the voting-eligible Mathematics and Statistics Graduate Faculty. The Chair of the Department of Mathematics and Statistics will administer the process of voting. Final approval of the Chair of the GSC resides with the Chair of the Department of Mathematics and Statistics, the Dean of the College of Arts and Sciences, and the Dean of the Graduate School.
- C. The Chair of the GSC may be removed from office by a majority vote of all voting-eligible Mathematics and Statistics Graduate Faculty and with the approval of the deans as described in (B) above.
- D. The duties of the Chair of the GSC are to provide experienced leadership in Graduate Program matters, to serve as the representative of the GSC to the university at large, and to preside over GSC and Graduate Faculty functions. Specific duties include but are not limited to:
 - i. Call and preside at meetings of the GSC and serve as a voting member
 - ii. Represent the interests of the Graduate Program in Mathematics and Statistics to the campus and University administrators
 - iii. Manage the budgets of the Graduate Program in Mathematics in Statistics in consultation with the Chair of the Department of Mathematics and Statistics
 - iv. Be responsible for the accuracy of all publications related to the Graduate Program in Mathematics and Statistics including web pages and catalog copy
 - v. Coordinate Mathematics and Statistics graduate course teaching assignments with relevant department chairs

- vi. Coordinate with the Graduate Program Coordinator (GPC) in activities related to the Graduate Program
- vii. Coordinate the Graduate Program in Mathematics and Statistics assessment process
- viii. Submit an updated list of all Mathematics and Statistics Graduate Faculty participants to the Dean of the Graduate School for approval annually

3.2 Graduate Studies Committee (GSC)

- A. The Mathematics and Statistics Graduate Studies Committee shall be composed of five voting-eligible Graduate Faculty members and be chaired by the Chair of the GSC. The committee members will be appointed by the Chair of the Mathematics and Statistics Department for a one year term (renewable).
- B. The GPC shall record minutes of each meeting and maintain one copy in the Graduate Program records. Minutes can be distributed to graduate faculty upon request.
- C. The duties of the GSC are to provide overall academic leadership for the Graduate Program in Mathematics and Statistics and to serve as the governing body in all Program decisions and policy. Specific duties include but are not limited to:
 - i. Serve as the governing body for all decisions on matters of membership, acceptance, discipline, and any other status decisions related to the Graduate Faculty, the graduate student body, and prospective graduate students.
 - ii. Provide all policy decisions for the Graduate Program in Mathematics and Statistics.
 - iii. Review, develop, and update long-range goals for the Graduate Program in Mathematics and Statistics and plans for their attainment. These ideas shall be presented at least once annually to a meeting of all faculty.
 - iv. Annually review and recommend amendments to these bylaws.
 - v. Provide guidance on administration of the Program.
 - vi. Assist with the Graduate Program in Mathematics and Statistics assessment process.

3.3 Other Committees

Other ad-hoc committees may be appointed by the Mathematics and Statistics Graduate Studies Committee as needed. Addition of new, or changes to the existing, standing committees must be approved by amendment of bylaws.

4 Graduate Student Committees

4.1 Selection

The initial selection, or subsequent changes, of a graduate student's committee shall be determined jointly by the student and the student's advisor. In accordance with the Policies and Procedures of the Graduate School at WSU, graduate students are not permitted to serve on the committees of other graduate students.

4.2 Composition

The graduate committee of each student shall have a minimum of three members. At least half of the committee members shall be voting-eligible Mathematics and Statistics Graduate Faculty members.

4.3 Conflict of Interest

Perceived conflict of interest as specified by the Graduate School rules should be avoided. An example could be a new faculty member, who was a WSU graduate student, serving on the advisory committee of a former graduate peer.

4.4 Review

As specified in the Graduate School's Policies and Procedures Manual, the performance of each graduate student shall be reviewed annually.

5 Student Representatives

At the discretion of the Chair of the Mathematics and Statistics Graduate Studies Committee and Mathematics and Statistics Graduate Faculty, student representation may be added or deleted from any committee structure. In accordance with the Policies and Procedures of the Graduate School at WSU, graduate students are not permitted to serve on the committees of other graduate students.

6 Graduate Faculty Meetings

6.1 The chair of the Mathematics and Statistics Graduate Studies Committee shall call Mathematics and Statistics Graduate Faculty meetings as needed but at least once per academic year. All attempts will be made to provide a written agenda in advance.

6.2 Other meetings may be called at the discretion of the Chair of the Mathematics and Statistics Graduate Studies Committee.

6.3 A special meeting of Mathematics and Statistics Graduate Faculty may be called by a petition of five or more Graduate Faculty members.

6.4 Efforts will be made to communicate items of interest, including notification of a faculty meeting, to the faculty via email. General Mathematics and Statistics Graduate Faculty meetings shall be called with a minimum of one week's notice.

6.5 Faculty not present on the Pullman campus at the time of a general Mathematics and Statistics Graduate Faculty meeting may participate by telephone conference call or other electronic means.

6.6 All proposals for Mathematics and Statistics Graduate Program curricular and policy changes must be approved by the Mathematics and Statistics Graduate Faculty.

7 Quorum for Graduate Faculty Meetings

- 7.1 Unless specified otherwise, a quorum for purposes of voting and other decision making is defined as the majority of Mathematics and Statistics Graduate Faculty eligible to vote (a minimum of 50%).
- 7.2 For other Mathematics and Statistics Program Committees to conduct a business meeting, a quorum shall be defined as a minimum of 50% of the committee membership.
- 7.3 In the event of a tie vote in a Graduate Faculty meeting, the Program Director will decide the outcome of the vote.

8 Amendments to Program Bylaws

- 8.1 The Program Bylaws document shall be reviewed every fifth year by the Mathematics and Statistics GSC and annually by the Chair of the GSC.
- 8.2 Amendments to the Bylaws may be initiated by any eligible Mathematics and Statistics Graduate Faculty member. Proposed amendments must be forwarded to the Mathematics and Statistics GSC and the Chair of the Mathematics and Statistics GSC. After discussion, proposed amendments shall be forwarded to the Mathematics and Statistics Graduate Faculty at least three days prior to the faculty meeting at which the amendments will be discussed. After discussion and possibly further amendments, the faculty may choose to vote on an amendment, table it for a future meeting, or elect to vote electronically or by secret ballot. Amendments to the Graduate Program in Mathematics and Statistics Bylaws require a positive vote from two-thirds of all voting-eligible Mathematics and Statistics Graduate Faculty.
- 8.3 All amendments and revisions must be submitted to the University Graduate Studies Committee and Faculty Senate for review and final approval.

9 List of Graduate Faculty Participants (as of July, 2023)

1. Thomas Asaki
2. Chencheng Cai
3. Xiongzhi Chen
4. Kevin Cooper
5. Nairanjana Dasgupta
6. Daryl DeFord
7. Trey DeJong
8. Alexander Dimitrov
9. Matthew Hudelson
10. Venkata Krishna Jandhyala
11. Harry Dean Johnson
12. Anna Johnston
13. Abhishek Kaul
14. Alexander Khapalov
15. Bala Krishnamoorthy
16. Sergey Lapin
17. Haijun Li
18. Sheng-Chi Liu
19. Valipuram Manoranjan

20. Judith McDonald
21. Charles Moore
22. Alexander Panchenko
23. Daniel Reiss
24. Lynn Schreyer
25. Elissa Schwartz
26. David Slavit
27. Matthew Sottile
28. Nikolay Strigul
29. Michael Tsatsomeros
30. Kevin Vixie
31. Nikolaos Voulgarakis
32. Xueying Wang
33. Yuan Wang
34. Anne Wilhelm
35. Hong-Ming Yin